EXHIBIT A

NEWTON'S TELECOM DICTIONARY

24th Edition

Harry Newton



New York

NEWTON'S TELECOM DICTIONARY

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Published in the United States by Flatiron Publishing 50 Central Park West New York, NY 10023



email: Harry@HarryNewton.com www.FlatironBooks.com Printed by Port City Press, Cadmus – a Cenveo Company 1323 Greenwood Road Baltimore, MD 21208

Distributed in the United States by National Bank Network 4501 Forbes Boulevard, Suite 200 Lanham, MD 20706

Orders Phone toll-free 1-800-462-6420 Direct 1-717-794-3800 Fax 1-800.338.4550 custserv@nbnbooks.com

Distributed outside the United States by Elsevier Inc.
11830 Westline Industrial Drive
St. Louis, MO 63146 USA
email: i.internet@elsevier.com
Tel: 1-314-453-7010
Fax: 1-314-453-7095
Toll-free 800-460-3110

ISBN 13 digit Number: 978-097938-731-9

March 2008 Twenty Fourth Edition Steve Schoen, Contributing Editor Gail Saari, Layout and Production Artist Gail Saari, Saul Roldan, and Damien Casteneda, Cover design

Newton's Telecom Dictionary 24th Edition March 2008

Stay In Touch

For suggestions, corrections, updates, special offers: please send an email to Harry@HarryNewton.com
I promise you I won't give your name to anybody. Nobody. Promise.

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AET Application Entity Title. The authoritative name of an OSI application entity, usually a

Distinguished Name from the Directory.

AF 1. Audio Frequency. The range of frequencies which theoretically are audible to the human ear; i.e., 30 Hz - 20 KHz. Truly high fidelity audio covers the entire range. Full AF is not practical over the PSTN, as to much bandwidth is required. Most of us can't hear the full AF range, anyway. As you get older, your hearing deteriorates. See also Bandwidth.

2. Assigned Frame. Motorola definition.

AFAIK As Far As I Know.

AFCEA Armed Forces Communications and Electronics Association. It is a non-profit association of active and retired telecommunications and networking professionals, with over 30,000 members from industry, government and the military. AFCEA has over 130 chapters worldwide. Chapter activities include meetings, seminars, symposia, continuing education opportunities, and other activities. AFCEA publishes SIGNAL, a monthly news magazine about communications and networking in C4ISR environments. www.afcea.org.

AFE See Analog Front End.

AFI An ATM term. Authority and Format Identifier: This identifier is part of the network level address header.

affiliate 1. This definition from the Telecommunications Act of 1996. The term 'affiliate' means a person that (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership or control with, another person. For purposes of this paragraph, the term 'own' means to own an equity interest (or the equivalent thereof) of more than 10 percent. See the Telecommunications Act Of 1996.

2. A broadcast TV station not owned by a network, but one which includes the network's

programs and commercials in its programming schedule.

Affiliated Sales Agency ASA. A term for a company which resells the service of a phone company. Typically, the phone company pays the ASA a commission. Sometimes the commission is so large that it blurs the thinking of the ASA into recommending to its customers telecom products and services they would be better without.

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AFI Authority and Format Identifier. The portion of an NSAP format ATM address that identifies the type and format of the IDI portion of an ATM address. See also IDI and NSAP.

AFIPS American Federation of Information Processing Societies. A national, highly-respected organization formed by data processing societies to keep abreast of advances in the field. AFIPS organizes one of the biggest trade shows in the data processing industry – the NCC (National Computer Conference).

affinity Requirements of an MPLS traffic engineering tunnel on the attributes of the links it will cross. The tunnel's affinity bits and affinity mask bits of the tunnel must match

the attribute bits of the various links carrying the tunnel.

AFI Authority and Format Identifier. The part of an NSAP-format ATM address that identifies the type and the format of the IDI portion of an ATM address. See also IDI and NSAP.

AFN All Fiber Network. Burlington, Vermont is building an AFN network for its municipality of 40,000 people. The AFN will first support city services. Then it will extend fast Internet service to its businesses and residences.

AFNOR Acronym for Association Française de Normalisation. France's national standards-

setting organization.

AFP AppleTalk File Protocol. Apple's network protocol, used to provide access between file servers and clients in an AppleShare network. AFP is also used by Novell's products for the Macintosh.

AFS Andrew File System.

AFT Automatic Fine Tuning; See AFC.

After-call Wrap-up The time an employee spends completing a transaction after the call has been disconnected. Sometimes it's a few seconds. Sometimes it can be minutes. Depends on what the caller wants.

aftermarket Trading in the Initial Public Offering after its IPO offering. Trading volume in IPOs is extremely high on the first day because of flipping (immediate selling) and

aftermarket orders.

AGC Automatic Gain Control. There are two electronic ways you can control the recording of something – Manual or Automatic Gain Control (AGC). AGC is an electronic circuit in tape recorders, speakerphones, and other voice devices which is used to maintain volume. AGC is not always a brilliant idea since it will attempt to produce a constant volume level, that is, it will try to equalize all sounds – the volume of your voice, and, when you stop talk-

ing, the circuit static and/or general room noise which you do not want amplified. Never record a seminar or speech using AGC. The recording will be decidedly amateurish. Manual Gain Control means there is record volume control and is thus, preferred in professional applications.

AGC Threshold The level of input current at which the AGC circuit becomes active.

AGC Time Constant The amount of time it takes to achieve the required AGC

level; also the amount of time it takes to recover from AGC.

AGCOMNET US Department of Agriculture's voice and data communications network.

Age of Interruption, The The world we live in today. We're working on the great american novel. The phone rings. An urgent email comes in. Our BlackBerry beeps.

Our notebook chimes. Bingo, we're interrupted. See also continuous partial attention.

aged packet A data packet which has exceeded its maximum predefined node visit count or time in the network.

agenda A list, outline, or plan of things to be considered or done. What I want out of life. My life's plan.

agent 1. The classic definition of an agent is an entity acting on behalf of another.

2. This term comes from the huge telephone call-in reservation centers which the airlines, hotels and car rental services run. An agent is the person who answers your call, takes your order or answers your question. Agents are also called Telephone Sales Representatives or Communicators. The term "agent" was first used in the airline business. It came from gate or counter ticket agent.

3. An "agent" is the person or persons you have legally authorized to order your

telephone service and equipment from telephone companies.

4. In the computer programming sense of the word, an agent acts on behalf of another person or thing, with delegated authority. The agent's goals are those of the entity that created it. An agent is an active object with a mission, but agents are abstractions that can be implemented in any way, whereas an object has a formal definition. Business Week in its February 14, 1994 issue wrote, "It's what computer scientists call an 'agent' – a kind of software program that's powerful and autonomous enough to do what all good robots should: help the harried humans by carrying out tedious, time-consuming, and complex tasks. Software agents just now emerging from the research labs can scan data banks by the dozen, schedule meetings, tidy up electronic in-boxes, and handle a growing list of clerical jobs."

5. Windows defines agent slightly differently. It said that an agent was software that runs on a client computer for use by administrative software running on a server. Agents are typically used to support administrative actions, such as detecting system information or running services.

See also Bot.

agent logon/logoff A call center term. Agents begin their day by punching some buttons on their phone. This indicates to the automatic call distributor that they are now ready to take calls. Later in the day, they punch some other buttons and indicate to the ACD that they are now ready to stop working. This is called logoff.

agent sign on/sign off A feature which allows any ACD agent to occupy any position in the ACD without losing his or her personal identity. Statistics are collected and consolidated about this agent and calls are routed to this agent no matter where he sits or how many positions he may occupy at one time.

aggregate AMA record A telephone company AIN term. An AMA record generated to record multiple instances of service usage within a specified aggregation interval. It is created by formatting peg counts of AMA events.

aggregate bandwidth 1. The total bandwidth of channel carrying a multiplexed bit stream. It includes the payload and the overhead. For example, a T-1 line has an aggregate full duplex bandwidth of 1.544 million bits per second.

2. The total amount of bandwidth that is provided on a facility. For example, a digital subscriber line that allocates 7 Mbps for Internet connectivity (for example, 6 Mbps downstream and 1 Mbps upstream) and 20 Mbps for HDTV channels, has 27 Mbps of aggregate

aggregate rate The sum of the channel data rates for a given application.

aggregation 1. An AMA (Automatic Message Accounting) function that accumulates AMA data, resulting in a less than detailed AMA record.

2. An ATM term. Token A number assigned to an outside link by the border nodes at the ends of the outside link. The same number is associated with all uplinks and induced uplinks associated with the outside link. In the parent and all higher-level peer groups, all uplinks with the same aggregation token are aggregated.

Making otherwise scattered data accessible at a single location, usually via a Web page. Aggregation is necessary to make sense of the hodgepodge of otherwise useful